

- 38 -

SEQUENCE LISTING

(1) GENERAL INFORMATION:

5 **(i) APPLICANT:**

Schmutz, Sheila Marie

RR # 2, Box 123

Saskatoon, SK, Canada

S7K 3J5

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Julie Janine Goodall

101B-815 Reid Road,

Saskatoon, SK, Canada

S7N 2W8

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(ii) TITLE OF INVENTION:

Improving Production Characteristics of Cattle

15 **(iii) NUMBER OF SEQUENCES: 3**

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(iv) CORRESPONDENCE ADDRESS:

Furman & Kallio

- 39 -

1400 – 2002 Victoria Avenue

Regina, SK, Canada

S4P 0R7

5 (v) COMPUTER-READABLE FORM:

COMPUTER: Dell Server

OPERATING SYSTEM: Windows XP Professional

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SOFTWARE: Microsoft Word – Office 2004 Version

. (vi) CURRENT APPLICATION DATA:

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APPLICATION NUMBER:

FILING DATE:

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CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

- 40 -

APPLICATION NUMBER: US 60/489,026

FILING DATE: July 23, 2003

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CLASSIFICATION:

(viii) **PATENT AGENT INFORMATION:**

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a) **NAME:**

Furman & Kallio

1400 – 2002 Victoria Avenue

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Regina, SK, Canada

S4P 0R7

b) **REFERENCE NUMBER: 1709-03-00**

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(2) **INFORMATION FOR SEQ ID NO: 1**

- 41 -

(i) SEQUENCE CHARACTERISTICS:

5 (a) LENGTH: 217 base pairs

(b) TYPE: nucleotide

10 (c) STRANDEDNESS: double stranded

(d) TOPOLOGY: linear

15 (ii) MOLECULE TYPE: genomic DNA

(iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

20 (vi) ORIGINAL SOURCE: Bos taurus

(viii) POSITION IN GENOME:

a) CHROMOSOME SEGMENT: BTA 29

- 42 -

b) MAP POSITION: 0 cM from ILSTS081

c) UNITS: centiMorgans

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(ix) FEATURE:

a) NAME/KEY: SNP-2

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b) LOCATION: bp 150

c) IDENTIFICATION METHOD: DNA sequencing of PCR
products

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d) OTHER INFORMATION: creates an additional BsrI
restriction site; affects birth weight, sex-corrected rib eye area
size, fat content and marbling

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(x) PUBLICATION INFORMATION:

a) AUTHORS: Goodall, J.J. and Schmutz, S.M.

- 43 -

b) TITLE: Linkage Mapping of IGF2 on Cattle Chromosome 29

c) JOURNAL: Animal Genetics

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d) VOLUME: 34

e) ISSUE: 4

10 f) PAGES: 313 – 313

j) PUBLICATION DATE: August 2003

k) RELEVANT RESIDUES IN SEQUENCE ID NO: 2: C or T

15 residue at position 150

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1

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cctcagccctc atccccctcct ttgcctccca gtcaaggcctg ctggggggtc tgagcaccac	61
agccagagca ccccccgcctt ggcagcgact gctactattg gcccagccag cggatcatcc	121
acctggcagt cgagagcctg gggcaccagy gacgtccagg tcctctttac ccaccgcccc	181

- 44 -

ggggagcttc agagacaaca cagcaaatacg agcacacg

217

(2) INFORMATION FOR SEQ ID NO: 2

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(i) SEQUENCE CHARACTERISTICS:

(a) LENGTH: 24 nucleotides

10 (b) TYPE: nucleotide

(c) STRANDEDNESS: single stranded

(d) TOPOLOGY: linear

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(ii) MOLECULE TYPE: DNA (primer)

(iii) HYPOTHETICAL: no

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(iv) ANTI-SENSE: no

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2

- 45 -

cctcagcctc atccccctcct ttgc

24

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(2) INFORMATION FOR SEQ ID NO: 3

(i) SEQUENCE CHARACTERISTICS:

10 (a) LENGTH: 25 nucleotides

(b) TYPE: nucleotide

(c) STRANDEDNESS: single stranded

15 (d) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (primer)

20 (iii) HYPOTHETICAL: no

(iv) ANTI-SENSE: no

- 46 -

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3

ctgtgctcta tttgctgtgt tgtct

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